

#14

Hawaiian Explorations.

D<sup>c</sup> 4005 - 4034.

Hy. 4464 - 4483.

June 17<sup>th</sup> - July 9<sup>th</sup>, 1902.

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

*007*  
*Failure*  
*Arrival*  
 No. 4005 *51* Date 17 June '02.  
*Sigsbee* Machine. 1 Reel. *4005*  
 Turns *525* Cor. + *52* Depth *577 fms*  
 Shot or lead *35 \**  
 Bottom *fine gy S. For.* R.  
 Bottom temperature *39.2*  
 No. of thermometer *92449* Cor.  
 Corrected temperature *(88.8)*  
 Air *80* Surface *78* Drift *2.8/10'*  
 Trawl or dredge *8' Tanner with apron*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	P.m. UP.
10.47.40	10.54.10	0	11.08.30	12.41.50
48.25	58.05	100	05.30	38.40
49.15	57.05	200	08.45	36.00
50.15	56.10	300	11.50	33.25
51.15	55.15	400	15.20	30.35
52.10	54.10	500	18.50	27.40
52.20	10.53.50	525	22.30	23.50
		700	26.29	20.10
		800	31.40	16.55
		850	40.00	
		900	51.00	13.55
		925	58.00	
		1000	12-03.35	12-09.00
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Whale Point, N 60° W, 2 <sup>2</sup>/<sub>10</sub>'

OK  
X 100  
in

Net No -  
54005.  
Hy. 4464.

525  
52  
57

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl = 2 sps. medusae; 3 sps prawns; 1 macruran; pyrosoma; cyclothone; electronus; ster- noptyx diaphana.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

## REMARKS:

Trawl was on bottom at 850 fms. 11.40 a.m. 302.  
Frame, and glass float lost; Net mended.

No. *H4. 4464.* Date *17 June '02.*  
*Sigsbee* Machine. *#1* Reel. *Navy*  
 Turns *436* Cor. + *44* Depth *480 fms.*  
 Shot or lead *35 Lbs.*  
 Bottom *co S. For.*  
 Bottom temperature *40.6*  
 No. of thermometer *92449.* Cor.  
 Corrected temperature  
 Air *80.* - Surface *77.* - Drift  
 Trawl or dredge

P.M. SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>12-44.30</i>	<i>12-54.05</i>	0		
<i>45.20</i>	<i>53.00</i>	100		
<i>46.05</i>	<i>51.55</i>	200		
<i>47.00</i>	<i>50.55</i>	300		
<i>47.50</i>	<i>49.55</i>	400		
<i>12-48.10</i>	<i>12-49.20</i>	<i>436</i> <del>500</del>		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

*also marks end  
 of  
 Dr. 4005*

Ukula Point, N 53° W., 3 <sup>8</sup>/<sub>10</sub>'

516  
5000  
/

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
436	3700	
44	3800	
480	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P.S. = 40.8

807.

No. *Dr. 4006*. Date *17 June '02*.*Sigsbee* Machine. # *1* Reel. *Navy*.Turns *220* Cor. + *22* Depth *242 fms.*Shot or lead *35* Lbs.Bottom *co. S. For. R.*Bottom temperature *47.5*No. of thermometer *92449*. Cor..

Corrected temperature

Air *80.* - Surface *77.* - Drift *(N 72° E)*Trawl or dredge *8' Tanner and Apron.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>1. 06. 30</i>	<i>1. 11. 50</i>	0	<i>1. 18. 45</i>	<i>2. 26. 00</i>
<i>07. 15</i>	<i>10. 45</i>	100	<i>22. 15</i>	<i>22. 25</i>
<i>08. 05</i>	<i>09. 40</i>	200	<i>25. 20</i>	<i>18. 40</i>
<i>1. 08. 15</i>	<i>1. 09. 30</i>	<i>220</i>	<i>28. 40</i>	
		<i>300</i>	<i>31. 20</i>	<i>2. 08. 00</i>
		<i>350</i>	<i>33. 15</i>	
		<i>400</i>	<i>1. 39. 40</i>	<i>45. 15</i>
		<i>420</i>		<i>1. 44. 00</i>
		<i>500</i>		
		<i>600</i>		
		<i>700</i>		
		<i>800</i>		
		<i>900</i>		
		<i>1000</i>		
		<i>1100</i>		
		<i>1200</i>		
		<i>1300</i>		
		<i>1400</i>		
		<i>1500</i>		
		<i>1600</i>		
		<i>1700</i>		
		<i>1800</i>		
		<i>1900</i>		
		<i>2000</i>		
		<i>2100</i>		
		<i>2200</i>		
		<i>2300</i>		
		<i>2400</i>		

Wakula Point, N 62° W, 45/10'

OK  
2100  
24

220  
22  
242

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl = Some small stones in remnants of net.			
50				
100				
200				
300				
360	390			
400				
500				
600				
700				
800				
900				
1000				

## REMARKS:

Stopped letting out dr. wire at 400 fms., but 4000 lbs. strain wound out to 420 fms. shortly after. — When leaving in back to run out from 360 to 390 fms (= 30 fms), while turning ship under port helm to clear trawl. — Hauliest strain at 200 fms. (4500 lbs.); immediately after which eased up to 1000 lbs. — Net wrecked; Frame twisted; Bridle parted.



No. *H. 4465.* Date *17 June, '02.**Sigsbee* Machine. *8* / Reel. *Mary.*Turns *52* Cor. + *5* Depth *57 fms.*~~Shot or lead~~ *36 Lbs.*Bottom *crs. lo S. Form.*Bottom temperature *72.3*No. of thermometer *92449.* Cor.

Corrected temperature

Air *81.* - Surface *76.* - Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

*2.31.40**52*

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

*also marks and  
of  
Lt. 4006.*

Ukula Point, N 72° 45' W, 5 <sup>6</sup>/<sub>10</sub>'

016  
2500  
2500

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

$$P.L. = 42.$$

Trawl or dredge \_\_\_\_\_

2 671

Lat. N 65° 30' N, 7<sup>4</sup>/<sub>10</sub>'

11  
519  
3.11

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

508

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Blake Trawl = 3 sps gorgonians; 2 sps. munida; sev pentachelids; 1 macruran; 2 sps prawns; 1 crab; 2 sps starfish; sev ophiocreas; 2 sps ophiu- rans, 1 very small urchin; fragments spatangoid; 1 worm; 4 sps macrurus.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4466

Date June 17 1902

Machine.

Reel.

Turns 506 Cor. +

Depth 557 fms

Shot or lead 35 lbs

Bottom lo S. Firm

Bottom temperature 39°

No. of thermometer 72449

Cor.

Corrected temperature

Air 81

Surface 76

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

25.30

36.20

0

26.25

35.20

100

27.10

34.20

200

28.10

33.20

300

29.10

32.10

400

30.10

31.05

500

31.10

30.00

506

32.10

28.55

700

33.10

27.50

800

34.10

26.45

900

35.10

25.40

1000

36.10

24.35

1100

37.10

23.30

1200

38.10

22.25

1300

39.10

21.20

1400

40.10

20.15

1500

41.10

19.10

1600

42.10

18.05

1700

43.10

17.00

1800

44.10

16.55

1900

45.10

16.50

2000

46.10

16.45

2100

47.10

16.40

2200

48.10

16.35

2300

49.10

16.30

2400

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4467* Date *June 17-12*  
*Sigsbee* Machine. #1 Reel. *Hand*  
 Turns *117* Cor. + *12* Depth *129 fms*  
 Shot or lead *36 lbs.*  
 Bottom *fs S Sh. Fm.*  
 Bottom temperature *65.7°*  
 No. of thermometer *92449* Cor.  
 Corrected temperature  
 Air *80* Surface *76* Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>4-56.05</i>	<i>59=</i>	0		
<i>56.45</i>	<i>57.50</i>	100		
<i>57=</i>	<i>57.40</i>	<i>117</i>		
		<del>200</del>		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Under current, N 79° W, 10.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:



No. 14009

Date 17 June 02

Machine. Sigsbee

Reel. 1

Turns 157 Cor. + 1

Depth 236 fms

Shot or lead 36 lb

Bottom gy. S. Co. bk. Sh. G. R.

Bottom temperature

50

No. of thermometer 92449 Cor.

Corrected temperature

Air 80

Surface 76

Drift

N 63° E  
4/10'

Trawl or dredge

52' Blue

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

5-13.55

15.05

0

12.4.30

12.05

14.45

15.05

100

27.50

05 =

15.30

16.05

200

31.00

34.55

300

34.30

6-01.00

350

42 =

400

50.05

57.40

450

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Latitude  $N 80^{\circ} 45' W.$ ,  $10 \frac{7}{10}'$

0.10  
3.00  
18.7  
1.1  
5.06

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Blake Trawl = "no results."			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

## REMARKS:

Trawl to 425 fms under 4000 ft  
Lynx  
Trawl slightly bent. - Bottle  
came loose from one end of  
frame

No. *4468* Date *June 17 1902*Machine. *#4* Reel. *Star*Turns *180* Cor. + *18* Depth *198 fms*~~Shot or lead~~ *36 lbs.*Bottom *fm Co. S. For.*Bottom temperature *51.3*No. of thermometer *92447* Cor.

Corrected temperature

Air *77* Surface *76* Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>6-13-00</i>	<i>18.15</i>	<i>0</i>
<i>14.30</i>	<i>16.40</i>	<i>100</i>
<i>15.10</i>	<i>15.40</i>	<i>200</i>

*7 hours and 40 min*  
*No 4008*

*300**400**500**600**700**800**900**1000**1100**1200**1300**1400**1500**1600**1700**1800**1900**2000**2100**2200**2300**2400*

2077. 11

Ok  
X  
X

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P.L. 48.6

507

No. 4009

Date June 17<sup>th</sup>

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor. 86208

Corrected temperature

Air 79 Surface 76 Drift 3.1

Trawl or dredge - Net on bottom

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

6:45.0 7:59.0

11 <sup>m</sup>/<sub>0</sub>

7:13.0 7:13.0

10 <sup>m</sup>/<sub>100</sub>  
200

7:17.0 7:27.0

10 <sup>m</sup>/<sub>300</sub>  
400

7:31.0 7:41.0

10 <sup>m</sup>/<sub>500</sub>  
600

7:45.0 7:55.0

10 <sup>m</sup>/<sub>700</sub>  
800

7:59.0 8:09.0

10 <sup>m</sup>/<sub>900</sub>  
1000

8:14.0 8:24.0

10 <sup>m</sup>/<sub>1100</sub>  
1200

8:28.0 = 71 min

1300  
1400

Beginning just before sundown ten minute hauls with 2 nets. All small crustacea preserved separate from each haul. Bright

1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400

1<sup>st</sup> haul -  
Comparatively small amount in first haul

In 2<sup>nd</sup> haul copepods very abundant.

3<sup>rd</sup> haul -  
nothing very much

4<sup>th</sup> haul. less than first.

5<sup>th</sup>, 6<sup>th</sup> & 7<sup>th</sup> hauls without Copepods.

2 Hippocampus;  
several Sigasus;  
2 flounders with symmetrical eyes;

moonlight, moon nearly full.

21° 54' 30" N, 159° 15' W.

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Partly covered by drift			
50	fine sand			S. E.
100	bottom			
200	cont -			
300	and a number of unrecognized			
400	species.			
500	There were also young crabs in			
600	abundance in 5 <sup>th</sup> , 6 <sup>th</sup> , & 7 <sup>th</sup> hauls.			
700	Cephalopods, medusae, heteropods,			
800	pteropods, & siphonophores in			
900	small numbers. Sclerite;			
1000	sphaerozoum.			

## REMARKS:

REMARKS:  
 Out log read 48.6 when commenced  
 striking surface of  
 Out log read 57.1 at end  
 of station. 57.1  
 20' of water 20' filled  
 in hole 20'

No. *4010* Date *July 1912*

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer *81205* Cor.

Corrected temperature

Air *77°* Surface *76°* Drift

Trawl or dredge *11' 8" dredge*

SOUNDING WIRE.

DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
<i>05.10</i>	<i>5.16</i>	0		
<i>11.06</i>	<i>5.16</i>	<del>100</del> 100		
<i>11.28</i>	<i>5.37</i>	<del>300</del> 300		
<i>11.39</i>	<i>5.47</i>	<del>500</del> 500		
<i>3 hours - 30 min</i>		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

21° 35' N. 158° 50' W.

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

## REMARKS:

REMARKS:

Lat long near 70.8 miles  
from shore. Bearing 100-  
110 degrees. Windy light  
fog. Temperature 20° at 10 AM.  
76.4 bearing from ship  
6.6 miles off shore.



Run 2.4 to 4.15  
2.25 miles.

No. 1011 Date 11 June 1902

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge 2 Surber, 100, 250, 500

# SOUNDING WIRE.

DOWN.

UP.

TURNS.

# DREDGE ROPE.

DOWN.

UP.

4.05 4.12

10 100

13 4.06 4.10

10 200

10 4.11 4.15

10 300

10 4.16 4.20

10 400

10 4.21 4.25

10 500

10 4.26 4.30

10 600

10 4.31 4.35

10 700

10 4.36 4.40

10 800

10 4.41 4.45

10 900

10 4.46 4.50

10 1000

10 4.51 4.55

10 1100

10 4.56 5.00

10 1200

10 5.01 5.05

10 1300

10 5.06 5.10

10 1400

10 5.11 5.15

10 1500

10 5.16 5.20

10 1600

10 5.21 5.25

10 1700

10 5.26 5.30

10 1800

10 5.31 5.35

10 1900

10 5.36 5.40

10 2000

10 5.41 5.45

10 2100

10 5.46 5.50

10 2200

10 5.51 5.55

10 2300

10 5.56 6.00

10 2400

10 6.01 6.05

Sphaeromyces, holina, calappa, fishes and crabs. No more cephalopods than during daylight.

21° 20' N. 158° 21' W.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Clear and calm, smooth.			
50	Natural light, clear, smooth.			
100	Sec.			
200	Surface Net: 1 <sup>st</sup> haul - clear			
300	starlight; moon set; faintest trace of			
400	dawn. 2 <sup>d</sup> & subsequent, faint			
500	twilight, to 1/2 daylight in the			
600	east.			
700	Myctophum taken only in 1 <sup>st</sup> & 2 <sup>d</sup> hauls.			
800	Flying fish numerous; practically no			
900	copepods. Dred bulk of catch consists of			
1000	a small schizopod + such forms as			

REMARKS:

Red. by 1.00 2.4 10.00  
commenced and 4.65 when  
finished towing the surface net.  
Ship having made 2.4 miles  
on course S. E. (7 miles)

P.L. 29.7

No. *4012* Date *20 June 02*

Machine. *#1* Reel. *Chapman*

Turns *1118* Cor. + *106* Depth *1224 fms*

Shot or lead *35*

Bottom *M. S. for. R.*

Bottom temperature *51.7*

No. of thermometer *92449* Cor.

Corrected temperature

Air *72*

Surface *72*

Drift

Trawl or dredge *5' Blake*

{ N 60° W }

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

<i>55.55</i>	<i>10.55</i>	0	<i>6.00</i>	
<i>56.05</i>	<i>10.51</i>	100	<i>46.00</i>	
<i>56.51</i>	<i>10.47</i>	200	<i>41.20</i>	
<i>57.37</i>	<i>10.43</i>	300	<i>32.00</i>	
<i>58.23</i>	<i>10.39</i>	400	<i>50.40</i>	
<i>59.09</i>	<i>10.35</i>	500	<i>55.20</i>	
<i>59.55</i>	<i>10.31</i>	600	<i>52.50</i>	
<i>60.41</i>	<i>10.27</i>	700	<i>06.25</i>	
<i>61.27</i>	<i>10.23</i>	800	<i>11.00</i>	
<i>62.13</i>	<i>10.19</i>	900	<i>15.15</i>	
<i>62.99</i>	<i>10.15</i>	1000	<i>19.40</i>	
<i>63.85</i>	<i>10.11</i>	1100	<i>23.50</i>	<i>11.50</i>
<i>64.71</i>	<i>10.07</i>	1200	<i>25.00</i>	<i>5.20</i>
<i>65.57</i>	<i>10.03</i>	1300	<i>22.40</i>	<i>4.00</i>
		1400	<i>25.15</i>	<i>11.00</i>
		1500	<i>42.30</i>	<i>9.00</i>
		1600	<i>40.00</i>	<i>8.00</i>
		1700	<i>10.00</i>	<i>07.30</i>
		1800		<i>07.00</i>
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

W. 21° 45' N. 68/10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800	Water probably decreased to about 1,000 fms. or (possibly) less.			
900				
1000				

REMARKS:

No. 4013 Date 20 902

Machine. 1 Reel. 1120  
Turns 381 Cor. + 39 Depth 419

Shot or lead 35

Bottom Foram. fine gy S.

Bottom temperature

No. of thermometer 92 449 Cor.

Corrected temperature

Air 77 Surface 81 Drift N 59° W  
3 10'

Trawl or dredge 8 ft. beam trawl

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
23.30	11.25	0	11.40.00	12.32.15
24.00	11.30	100	44.30	29.00
24.30	11.40	200	11.3.00	25.30
25.00	11.50	300	51.30	22.15
25.30	12.00	381	54.30	18.30
		500	57.30	15.00
		600	11.59.10	12.11.10
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Station 1112, N 82° 45' W., 3 7/10'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
4000	3300	
	3400	
	3500	
	3600	
	3700	
391	3800	
391	3900	
419	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	<p>Tanner Trawl:</p> <p>1 Boreonian, 1 ophioceras attached, several prawns, several long-spined urchins, 1 young cyclothone (?).</p>			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Dr. 4014* Date *30 June '02*  
*Sigsbee* Machine *Navy*  
 Turns *363* Cor. + *36* Depth *400 fms.*  
~~Shot or lead~~ *36 Lbs.*  
 Bottom *S. Foram.*  
 Bottom temperature *40.8*  
 No. of thermometer *72449* Cor. *(N 53° 71)*  
 Corrected temperature  
 Air *77* - Surface *75* - Drift *1'*  
 Trawl or dredge *8'*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>35.55</i>	<i>1245.30</i>	0	<i>1.54.30</i>	
<i>36.45</i>	<i>42.20</i>	100	<i>55.30</i>	<i>47.30</i>
<i>37.30</i>	<i>41.15</i>	200	<i>58.45</i>	<i>44.00</i>
<i>38.15</i>	<i>40.10</i>	300	<i>1. 30.00</i>	<i>40.15</i>
<i>39.00</i>	<i>39.05</i>	400	<i>05.20</i>	<i>36.25</i>
		500	<i>00.50</i>	<i>32.30</i>
		600	<i>13.40</i>	<i>28.40</i>
		700	<i>16.45</i>	<i>26.50</i>
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Handmaul's No. N 85° W., 3 1/10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl.			
50				
100	3 Neoscopelus macrolepidotus; 1 macrurus gibber; 1 Coeloccephalus aciferperinus; 1 holothurian; 3 kinds shrimp - few.			
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Two 200 fms. Tanner  
trawl - 1000 fms. full  
of tad knicks -



No. 4015 Dr. Date Dec 12 1892  
 Machine. Sigsbee Reel. 11  
 Turns 329 Cor. + 52 Depth 381 fms  
 Shot or lead 36 Lbs.  
 Bottom gy S. R.  
 Bottom temperature 41.2  
 No. of thermometer 92447 Cor. (N45°W)  
 Corrected temperature 41.2  
 Air 77 Surface 72 Drift 9/10  
 Trawl or dredge 8' Tanner

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
1.54.25	2.01.25	0	2.06.20	2.09.10
55. -	2.00.15	100	10. -	2.08.00
55.05		200	20.45	2.06.50
1.57.00	55.10	300	30.45	
1.57.45		400	39.45	
		500	49.15	
		600	59.25	
		650	2.30.00	
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

also recorded in  
 of  
 Dec. 4014.

Ammonia wh. 8820H, 2 1/10'

OK  
HOB  
2/2

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl:			
50	1 Diaphus?; 1 Coeloccephalus			
100	acipenserinus; 2 sps Holothuria			
200	1 each; 2 sps Shrimps; 1 phormo-			
300	soma; 1 pyrosoma; 1 annelid;			
400	gorgonian stem with cirripeds			
500	attached.			
600				
700				
800				
900				
1000				

# REMARKS:

1 Net. Slightly torn.

No. 4016 Date 20 June 02.

Machine 1 Reel.

Turns 289 Cor. + 79 Depth 368 fms.

Shot or lead 36 lbs.

Bottom bk S.

Bottom temperature 42.9

No. of thermometer 92449 Cor.

Corrected temperature

Air Surface Drift N 16° W

Trawl or dredge 8' Beam

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

3.12.05	3.	0	3.23.40	21.00
12.52	15.10	100	17.30	
12.45	15.05	200	13.50	
3.14.25	3-15.10	300	09.50	
		400	05.30	
		500	02.10	
		600	58.40	
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

St. Lawrence, Mass., 862° W., 2 2/10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl: Diaphus melanopus; ? macrurus; 4 sp. prawns; 1 amphipod.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4017* Date *20<sup>th</sup> June '02.*Machine. *71* Reel. *1*Turns *277* Cor. + *28* Depth *305*Shot or lead *36 lbs.*Bottom *gy. S.*Bottom temperature *43.3*No. of thermometer *92449* Cor.

Corrected temperature

Air *77* Surface *70* Drift *1 1/10'*Trawl or dredge *Stannard with net*

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>4-25.25</i>	<i>22.05</i>	0	<i>4-48.20</i>	<i>31.30</i>
<i>26.20</i>	<i>31.00</i>	100	<i>51.50</i>	<i>27.00</i>
<i>27.20</i>	<i>30.00</i>	200	<i>55.00</i>	<i>22.20</i>
<i>28.10</i>	<i>29.10</i>	<i>277</i>	<i>57.20</i>	<i>17.15</i>
<i>29.16</i>	<i>28.10</i>	400	<i>5-03.25</i>	<i>15.20</i>
		<i>450</i>	<i>55.10</i>	<i>12.55</i>
		<del>500</del>		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Handwritten: 148° 45' W, 2 4/10'

Handwritten: 21.98 / 30

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl = 2 peristedion; 1 hermit; 2 prawns; 1 pyrosoma; fragment of ...			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4018 Date 21 June 1902  
Lipbar Machine. Reel. 1100  
Turns 731 Cor. + 73 Depth 804  
Shot or lead #60

Bottom For. S. - frag. Mangr.

Bottom temperature

No. of thermometer 92449 Cor.

Corrected temperature

Air 72 Surface 77 Drift

Trawl or dredge 1100 ft. beam trawl

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

10.00	7.25.10	0	7.31.45	9.22.50
10.30	7.24.10	100	36.10	24.10
11.00	7.23.10	200	39.50	21.20
11.30	7.22.10	300	43.20	18.25
12.00	7.21.10	400	47.00	15.20
12.30	7.20.10	500	50.40	12.10
13.00	7.19.10	600	54.05	08.50
13.30	7.18.10	700	57.20	05.00
14.00	7.17.10	731	8.01.00	9.01.00
		900	04.25	57.00
		1000	07.25	53.00
		1100 *	10.50	49.15
		1125	20.30	
		1200	30.30	45.35
		1250	40.00	8.44.15
		1300	42.25	
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

1. Surface Temp.  
8.15 a. 8.14 a.  
8.15 a. 8.28 a.  
2. Wind - S. by E.

\* On bottom from this line.

Station 8570 N. 7 1/10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50	Clear, air milky. Light 10 ft.			
100	Boys, 1 small, Jan.			
200	Tanner Trawl =			
300	3 Halosaurus; 1 macrurus; 3			
400	cyclothone; 1 yg. coryphæna (from surface);			
500	3 ochizopods; 1 oh. imp; 1 oh. y. gorgie;			
600	1 phionas attached; part of phionas;			
700	1 pyrosoma.			
800				
900	Surface Net - 10' haul =			
1000	Almost nothing. Few blue capipeds;			

REMARKS:

3 or 4 other small crustacea; 2 small fishes;  
no pink capipeds if the kind abundant at  
sounding.  
10' haul = almost nothing - few blue  
capipeds; no other. 3 small fishes; 2 small  
shrimps.



No. *Dr. 4019*. Date *21 June, '02*.*Sigsbee* Machine. *R* / Reel. *Dray*.Turns *678* Cor. + *46* = Depth *724 fms.*Shot or lead *35 lbs.*Bottom *gy. S. From. R.*Bottom temperature *37.8°*No. of thermometer *92449* Cor.

Corrected temperature

Air *54* - Surface *55* - DriftTrawl or dredge *8' Tanner with*

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>30.50</i>	<i>43.50</i>	0	<i>9.49.20</i>	<i>10.22.15</i>
<i>31.30</i>	<i>43.50</i>	100	<i>52.40</i>	<i>51.45</i>
<i>32.20</i>	<i>43.50</i>	200	<i>56.05</i>	<i>42.00</i>
<i>33.15</i>	<i>41.45</i>	300	<i>57.30</i>	<i>45.10</i>
<i>34.15</i>	<i>40.10</i>	400	<i>10.02.40</i>	<i>44.20</i>
<i>35.15</i>	<i>39.35</i>	500	<i>10.20</i>	<i>57.40</i>
<i>36.15</i>	<i>38.10</i>	600	<i>10.20</i>	<i>58.00</i>
<i>37.15</i>	<i>38.05</i>	700	<i>10.20.40</i>	<i>10-32.30</i>
		800	<i>19 min.</i>	

*also marks end**R**Dr. 4018**splendid haul.*

\* Trawl on bottom

when rearing to 638 fms.

40° angle.

Latitude, 84°30'N., 8'10'

	2500
	2600
	2700
	2800
	2900
	3000
	3100
	3200
	3300
	3400
	3500
	3600
	3700
450	3800
658	3900
26	4000
724	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl =			
50	1 Eel; large			
100	crustacean in stomach; 1 melanurus;			
200	1 stomias; 1 aldrovandia; 3 macrurus;			
300	sevl (3 sps) holothuria; 1 phormosoma;			
400	3 sps. Starfish; 2 sps. ophiurans; 1 urchin;			
500	many phioceas; 4 sp. gorgonians; 2 sps.			
600	Sponges; 3 sps. prawns; 1 cephyrean;			
700	1 nudid; 1 pectachelus.			
800				
900				
1000				

# REMARKS:

Some sort slightly. Excellent results and clean hauls. Not too bottom at less than initial sounding - and was dragged in depth. probably ranging 8 to 550 and 450 fms.

No. *Do. 4020*. Date *21 June 02.*  
*Liscoe* Machine / Reel. *Turn*.  
 Turns *372* Cor. + *37* = Depth *409 fms.*  
 Shot or lead *36* Lbs.  
 Bottom *Co. S.*  
 Bottom temperature *41. -*  
 No. of thermometer *95449*. Cor. *(N. 7.5)*  
 Corrected temperature  
 Air *81. -* Surface *75. -* Drift *(1 2/10)*  
 Trawl or dredge *8' (Tanner)*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>10.58.20</i>	<i>11.06.50</i>	0	<i>11.16.00</i>	<i>39.10</i>
<i>59.00</i>	<i>05.15</i>	100	<i>19.45</i>	<i>06.00</i>
<i>59.50</i>	<i>04.40</i>	200	<i>22.15</i>	<i>02.35</i>
<i>11.00.25</i>	<i>04.15</i>	300	<i>26.55</i>	<i>58.50</i>
<i>01.05</i>	<i>11.02.45</i>	372	<i>30.30</i>	<i>55.15</i>
		400	<i>11.32.15</i>	<i>52.30</i>
		450		
		500		
<i>the netting and</i>		600	<i>29 min.</i>	
<i>11.02.15</i>		700		
		800		
		900		
		1000		
<i>* Riddle stopped</i>		1100	<i>Method is unsatisfactory, heavy the top of frame, means the after with the bottom -</i>	
<i>to the beam, until</i>		1200		
<i>it was possible to</i>		1300		
<i>proceeding for an</i>		1400		
<i>interval.</i>		1500		
		1600		
		1700		
<i>the bottom of the</i>		1800		
<i>upto 250 fms. from</i>		1900		
<i>working end.</i>		2000		
		2100		
		2200		
		2300		
		2400		

Handwritten: 8330 H, 8<sup>5</sup>/<sub>10</sub>'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
372	3900	
37	4000	
409		

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Danner Trawl: Pyrosoma (from surface). 2 sp. prawns.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

*Tellurium*

No. *4021* Date *21st June 02.*

Machine. Reel.

Turns *260* Cor. + *26* Depth *286 fms*

Shot or lead *36*

Bottom *br S. 1.50v*

Bottom temperature *44°*

No. of thermometer *92447* Cor.

Corrected temperature

Air *51*

Surface *55*

Drift

Trawl or dredge *10' Blake*

*(N2)*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

<i>2-11.15</i>	<i>17.15</i>		<i>12.24.45</i>	<i>21.30</i>
<i>12.00</i>	<i>16.10</i>	100	<i>27.10</i>	<i>20.40</i>
<i>12.40</i>	<i>15.10</i>	200	<i>33.30</i>	<i>19.10</i>
<i>13.20</i>	<i>14.30</i>	<i>260</i>	<i>37.30</i>	<i>18.00</i>
<i>Marks end of</i> <i>N 4020</i>		400	<i>42.25</i>	<i>17.05.50</i>
		500	<i>23 min 20 sec</i>	
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Station 2101, E 28° 30' N, 9 5/10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	See next page for catch -			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *H 4022* Date *Aug 2, 1902*  
*Sigsbee* Machine. #1 Reel. *Long*  
 Turns *363* Cor. + *36* Depth *399 fms*  
 Shot or lead *36 lbs.*  
 Bottom *S. S. for R*  
 Bottom temperature *41*  
 No. of thermometer *92449* Cor. *(1.50° F)*  
 Corrected temperature  
 Air *80* Surface *74* Drift *2.10*  
 Trawl or dredge *10' Benthic*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

<i>1-22.25</i>	<i>23.25</i>		<i>1-35.5</i>	<i>12.15</i>
<i>23.10</i>	<i>29.20</i>	<i>100</i>	<i>41.10</i>	<i>08.30</i>
<i>24.10</i>	<i>35.15</i>	<i>200</i>	<i>44.20</i>	<i>05.10</i>
<i>24.55</i>	<i>27.05</i>	<i>300</i>	<i>48.10</i>	<i>3- 11.30</i>
<i>25.30</i>	<i>26.15</i>	<i>363</i>	<i>51.40</i>	<i>57.45</i>
<i>Mark and f</i>		<i>455</i>	<i>55.5</i>	<i>53.50</i>
<i>5 4021</i>		<i>500</i>	<i>58.5</i>	<i>49.10</i>
		<i>555</i>	<i>2-00.50</i>	<i>45.35</i>
		<i>655</i>	<i>59.10</i>	<i>41.25</i>
		<i>755</i>	<i>1-10.20</i>	
		<i>855</i>	<i>1-10.15</i>	
		<i>1000</i>	<i>20.30</i>	<i>0</i>
		<i>1100</i>		
		<i>1200</i>		
		<i>1300</i>		
		<i>1400</i>		
		<i>1500</i>		
		<i>1600</i>		
		<i>1700</i>		
		<i>1800</i>		
		<i>1900</i>		
		<i>2000</i>		
		<i>2100</i>		
		<i>2200</i>		
		<i>2300</i>		
		<i>2400</i>		

\* on bottom

*36 min*

*Strombosyllis nana*, 830° N. 10 2/10'

OK  
11.10.  
11

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Blake Trawl: Dr. #4021			
50	<i>Macrurus propinquus</i> <i>macrurus</i> ; 1 spec.			
100	<i>Parapionosoma</i> <i>maculipidus</i> ; 4 amphipods;			
200	1 <i>monocanthus</i> ; 3 sp. sponges; many (8 sp.)			
300	brans; sev. <i>munida</i> ; 3 annelids, many			
400	<i>phormosoma</i> ; many long-spined urchins;			
500	1 <i>ophiurus</i> ; 1 <i>ophiuran</i> . 4 starfish;			
600	4 sp. <i>holothurians</i> ; 1 <i>gorgonian</i> ; hydroids			
700	attached to rotten coral stones; 2 anemones.			
800				
900				
1000				

# REMARKS:

Beane ~~11.10.~~ 11.10. 11.10. 11.10.  
on rock.

Blake Trawl = Dr. #4022 = 2 sp.  
*macrurus*; 3 sp. sponges, 3 sp. annelids;  
4 sp. shrimp; sev. long-spined urchins;  
sev. *phormosoma*; 1 starfish; 1 crab;  
2 *holothurians*; 1 hydroid.



*Michelson*

No. *4469* Date *July 31<sup>st</sup>*  
Machine. #1 Reel. *Chas.*  
Turns *340* Cor. + *34* Depth. *374 fms*  
~~Shot or lead~~ *36 lbs.*  
Bottom *gy. s. & b. s. for*  
Bottom temperature *41.6*  
No. of thermometer *92449* Cor.  
Corrected temperature  
Air *78* Surface *76* Drift  
~~Trawl or dredge~~

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>3.15.00</i>	<i>23 =</i>	0		
<i>15.50</i>	<i>21.50</i>	100		
<i>16.00</i>	<i>20.40</i>	200		
<i>17.50</i>	<i>19.20</i>	300		
<i>17.50</i>	<i>18.40</i>	<i>340</i> 400		
<i>Mark end of</i>		500		
<i>W 4092</i>		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Harvard Whse, 829<sup>th</sup> St, 10<sup>th</sup> Ave

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 1023 Date 23 Machine. — Reel.

Turns Cor. + Depth  
 Shot or lead 26  
 Bottom gy. s. or. d. v.  
 Bottom temperature  
 No. of thermometer Cor.  
 Corrected temperature  
 Air 75 Surface 80 Drift { 212307  
 Trawl or dredge 10 ft B. R.

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
12.56		10	1.00.00	50.00
		20	05.00	48.35
		30	1.08.00	28.00
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Atkuaa det, N 85° 30' E, 6 2/10'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
41 15	3500	
17	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Blake Trawl:			
50	1 scarpaena; few fragments of			
100	Sponge; 3 sp. algae; 2 sp. crabs -			
200	alpheus; starfish in head of			
300	living Coral.			
400				
500				
600				
700				
800				
900				
1000				

# REMARKS:

Up with ...  
 ...  
 ...

No.

4410

Date

21 June 1902

Machine.

Reel.

Turns

2

Cor. +

Depth

11

Shot or lead

31

Bottom

gy S for

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

71

Surface

70

Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

31.00

127.00

0

700

1000

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

11023

*Handwritten notes at the top of the page, possibly indicating a date or location.*

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 1024

Date

Machine.

Reel.

Torns 22 Cor. +

Depth 24

Shot or lead 36

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

1.47.00

1.50.10

200

2:08.00

2:14.00

100

11.30

200

24.00

2:31.00

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Station 8808, 7 1/10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

496

12

4900

2.7

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tangles:			
50	few starfish; evil urchins;			
100	few ophiurans; many sp. sponge;			
200	much of evil sp. Bryozoa; dead			
300	gorgonian stems; 2 sp. coral;			
400	H. paraperis; 2 small fishes;			
500	2 crabs; 1 alphea; much of evil			
600	sp. algal.			
700				
800				
900				
1000				

REMARKS:



No.

4471

Date

22800000

Machine.

Reel.

Turns

Cor. +

Depth

43 1/100

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

22800 240.00

39

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Station 543 37° 20' N 9° 10' W

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1020* Date *23 June 02*  
*Machine.* *Reel.*  
 Turns *250* Cor. + *4* Depth *254 fms*  
 Shot or lead *35*  
 Bottom *gy. d. h. 50*  
 Bottom temperature *44.2*  
 No. of thermometer *92449* Cor. *(3112)*  
 Corrected temperature  
 Air *76* Surface *75* Drift  
 Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

<i>3.12.40</i>	<i>3.20.00</i>	0	<i>3.26.00</i>	<i>4.33.15</i>
<i>14.30</i>	<i>17.00</i>	100	<i>30.00</i>	<i>42.5</i>
<i>15.25</i>	<i>18.00</i>	200	<i>33.30</i>	<i>43.2</i>
<i>16.00</i>	<i>17.30</i>	<i>250</i>	<i>37.30</i>	<i>43.5</i>
		400	<i>41.50</i>	<i>44.5</i>
		500	<i>* 45.5</i>	<i>45.15</i>
		600	<i>3.29.00</i>	
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

866°E, 10<sup>4</sup>/<sub>10</sub>'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner. Traut =			
50	Hermit; many (2 sp) phormosoma;			
100	2 sp. ophurans; 1 holothurian;			
200	sponge fragments; 3 sp. prawns;			
300	optonurus atherodon; Poecorhynchus?			
400	Chalinura eteoneles; neosepius			
500	macrolepidotus; pyrosoma.			
600				
700				
800				
900				
1000				

REMARKS:

No. 4025 Date 23 Aug 1881

Machine. Reel.

Turns 335 Cor. + 33 Depth 368 fms.

Shot or lead 36 lbs.

Bottom fine gy. S.

Bottom temperature 41.0

No. of thermometer 92449 Cor.

Corrected temperature

Air Surface Drift

Trawl or dredge 8 f.

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

4.21.15	4.56.10	0	4.41.15	5.22.15
4.22.20	35.00	100	4.42.20	5.23.20
4.23.25	34.10	200	4.43.25	5.24.25
4.24.30	33.10	300	4.44.30	5.25.30
4.25.35	32.25	400	4.45.35	5.26.35
		500	4.46.40	5.27.40
		600	4.47.45	5.28.45
		700	4.48.50	5.29.50
		800	4.49.55	5.30.55
		900	4.51.00	5.32.00
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

also marks and

at

Dr. 4025

Station 310, 86° 30' E., 11.0'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

## REMARKS:

1 Therm. evidently not on bottom;  
 results missing.  
 1 Stomias, 2 Sternopteryx;  
 2 Myxodonta; 1 Myxodonta.

No. 5472 Date 23 June 02.

Machine. / Reel. Mary

Turns 930 Cor. + 91

Depth 1021 fms.

Shot or lead 36 Lbs.

Bottom M. gy. S.

Bottom temperature 56.0

No. of thermometer 92449.

Cor.

Corrected temperature

Air 75.0

Surface 75.0

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

57.20	6. 14.25	0	
58.00	15.00	100	
58.45	15.45	200	
59.30	16.30	300	
60.15	17.15	400	
61.00	18.00	500	
61.45	18.45	600	
62.30	19.30	700	
63.15	20.15	800	
64.00	21.00	900	
64.45	21.45	1000	
		1100	
		1200	
		1300	
		1400	
		1500	
		1600	
		1700	
		1800	
		1900	
		2000	
		2100	
		2200	
		2300	
		2400	

Massachusetts, 2675, 1351

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:



*not*  
*4027*  
 No. *4027* Date *June 24th*  
 Machine. #1 Reel. *Star*  
 Turns *270* Cor. + *29* Depth *319 fms*  
 Shot or lead *36 lbs.*  
 Bottom *gy. M. R.*  
 Bottom temperature *45.5*  
 No. of thermometer *93449* Cor.  
 Corrected temperature  
 Air *77* Surface *77* Drift *(1.0)*  
 Trawl or dredge *10 ft. B. & C.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>6-41.45</i>	<i>45.45</i>	0	<i>6-52.00</i>	<i>7.59.00</i>
<i>42.25</i>	<i>47.40</i>	100	<i>53.10</i>	<i>7.58.30</i>
<i>43.10</i>	<i>46.35</i>	200	<i>7-01.10</i>	<i>7.57.00</i>
<i>44</i>	<i>45.25</i>	270	<i>02.10</i>	<i>47.40</i>
		300	<i>03.00</i>	<i>31.10</i>
		400	<i>04.00</i>	<i>7.53.40</i>
		500		
		600		
		700		
<i>7-18 "</i>	<i>7.25 "</i>	800		
		900		
<i>2 hauls -</i>	<i>17 min.</i>	1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

8740 E., 6.0'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Net badly torn.

No. 4473

Date

24 June 1902

Machine. 1

Reel.

Turns 290 Cor. +

Depth 319 fms

Shot or lead 36

Bottom gy. M.

Bottom temperature 42.2

No. of thermometer 92449

Cor.

Corrected temperature

Air 83

Surface 78

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

4:40 12.15  
 4:40 12.10  
 5:30 11.10  
 6:30 11:10.00

0  
 100  
 200  
 290  
 400  
 500  
 600  
 700  
 800  
 900  
 1000  
 1100  
 1200  
 1300  
 1400  
 1500  
 1600  
 1700  
 1800  
 1900  
 2000  
 2100  
 2200  
 2300  
 2400

Mule Point 871°45'E., 7.0'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

97.3

No. 4474

Date

Machine

Reel

Turns 331

Cor. + 33

Depth 364

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

38.50  
39.40  
40.30  
41.20  
42.10

43.00  
43.35  
43.10

0  
100  
200  
300  
331

400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400

Wanda Bay. S 78° E. 10 1/2 m.

	2500	
10	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 1028

Date

Machine

Reel

Turns 404 Cor. + 40

Depth 444

Shot or lead

Bottom gy. s. g. l. b.

Bottom temperature 40.2

No. of thermometer 9244

Cor.

Corrected temperature

Air

Surface 75

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

9:12.20 9:21.20  
 10.00 20.15  
 11.15 19.10  
 12.45 18.15  
 15.40 17.15  
 15.45 17.10

0  
 100  
 200  
 300  
 400  
 404  
 500

600  
 650  
 700  
 800  
 900  
 950  
 1000

1100  
 1200  
 1300  
 1400  
 1500  
 1600  
 1700  
 1800  
 1900  
 2000  
 2100  
 2200  
 2300  
 2400

9:27.00 11.07.00  
 10.00 11.00  
 11.00 11.01.10  
 12.00 11.00  
 13.00 11.00  
 14.00 11.00  
 15.00 11.00  
 16.00 11.00  
 17.00 11.00  
 18.00 11.00  
 19.00 11.00  
 20.00 11.00  
 21.00 11.00  
 22.00 11.00  
 23.00 11.00  
 24.00 11.00

8820 30' E., 10 <sup>2</sup>/<sub>10</sub>'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl =			
50	2 sp. crabs; 2 sp. pentacheles; 1 merula;			
100	5 sp. shrimp; 2 sp. spot; 4 sp.			
200	starfish; 2 sp. ophiurans; 1 urchin;			
300	2 sp. pelceypods; 1 tectibranch;			
400	1 gastropod; 1 holothurian; worm			
500	tubes; 1 annelid; 1 cholinera;			
600	3 trachonurus; 2 macrurus.			
700				
800				
900				
1000				

REMARKS:



No.

4079

Date

2

Apr 11 1902

Machine.

Reel.

Turns

435

Cor. +

43

Depth

478 fms

Shot or lead

35

Bottom

gy. s. glob.

Bottom temperature

40.2

No. of thermometer

92447

Cor.

Corrected temperature

Air

56

Surface

79

Drift

{ 8.40" 1.0'

Trawl or dredge

H. T. dredge 16' 10" 19016

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

11.15	12.42.00	0	11.45.00	12.30.00
11.20	12.41.15	100	11.49.00	12.29.00
11.25	12.40.15	200	11.52.15	12.28.00
11.30	12.39.15	300	11.55.30	12.27.00
11.35	12.38.20	400	11.58.00	12.26.00
11.40	12.37.50	435	12.00.00	12.25.00
		500	12.02.55	12.24.00
		600	12.05.55	12.23.00
		700	12.08.00	12.22.00
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

W. 11.0' 886° E. 11.0'

		2500	
		2600	
		2700	
		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
4830	257	3400	
		3500	
4445		3600	
		3700	
		3800	
		3900	
		4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl:			
50	2 schizopods; 2 sp prawns;			
100	1 medusa; 1 ctenophore (surface)			
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4115* Date *2nd June '00.*  
*Sigsbee* Machine. *N* Reel. *Y*  
 Turns *415* Cor. + *415* Depth *830 fms.*  
 Shot or lead *35 lbs.*  
 Bottom *fine Co S, for*  
 Bottom temperature *40.2°*  
 No. of thermometer *92449* Cor.  
 Corrected temperature  
 Air *83°* - Surface *78°* - Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11.50.00</i>	<i>12.15.00</i>	0		
<i>11.51.00</i>	<i>12.14.00</i>	100		
<i>11.52.00</i>	<i>12.13.00</i>	200		
<i>11.53.00</i>	<i>12.12.00</i>	300		
<i>11.54.00</i>	<i>12.11.00</i>	400		
<i>11.55.00</i>	<i>12.10.00</i>	<i>412</i>		
		500		
		600		
<i>At 700 fms. the</i>		700		
<i>bottom was reached.</i>		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Uthmaniyah, 889.6, 12<sup>8</sup>/<sub>10</sub>

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 35430. Date 24 Jan, '02.

Machine. / Reel.

Turns 385 Cor. + 38 Depth 423 fms.

Shot or lead 35 Lbs.

Bottom In Co S. Frv. R.

Bottom temperature 41.0 -

No. of thermometer 92449. Cor.

Corrected temperature

Air 82.0 - Surface 6.0 - Drift

Trawl or dredge 8' Tanner with apr.

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

1-15.45	2.12.45	0	2-18.30	3.49.10
16.35	11.40	100	22.30	46.00
17.30	10.45	200	26.00	
18.20	09.50	300		
1-19.00	2-08.45	385		37.40
		400		
		500	38.00	.45
		600	42.20	28.00
		700	3-00.00	22.00
		800	06.20	14.35
		810		3-13.30
		900		
		1000	13.30 min.	
		1100		
		1200		
② Dr. Mach.		1300		
at 450 fms., when		1400		
heaving in, strain		1500		
was broken. No.		1600		
lead from about		1700		
4000 lbs to 1500 lbs.		1800		
③ Bath bridle -		1900		
		2000		
one runner and bar		2100		
hook; nothing lost.		2200		
		2300		
		2400		

A 82° 30' E., 13<sup>1</sup>/<sub>10</sub>'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl:			
50	2 spp. gorgonians, with			
100	sphioceras attached; 1 macrourus;			
200	pink broken archins.			
300				
400				
500				
600				
700				
800				
900				
1000				

① *2 do. Mach.* REMARKS:

\* When the street below mine  
jumped from accumulation which had  
from back causing several bad  
kinds. There was 2. for more  
and oil, mine pit and ground  
cup "face up etc.

*Hutchinson*  
No. *4476* Date *24 June 1912*

*Ligeia* Machine *N 1* Reel. *700*

Turns *398* Cor. + *40* Depth *438 fms.*

Shot or lead *35 Lbs.*

Bottom *fm Co S. cor. Sh.*

Bottom temperature *40.9°*

No. of thermometer *92449* Cor.

Corrected temperature

Air *81* Surface *76* Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>3-51.25</i>	<i>59.55</i>	0		
<i>51.55</i>	<i>58.45</i>	100		
<i>52.50</i>	<i>57.40</i>	200		
<i>53.40</i>	<i>56.35</i>	300		
<i>54.30</i>	<i>55.35</i>	<i>398</i>		
		<del>400</del>		
<i>Time used</i>		500		
<i>Dr 4030</i>		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

885° 15' E., 14<sup>5</sup>/<sub>10</sub>

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:



No. *4477* Date *24 June 52.*Machine. *H* / Reel. *C*Turns. *345* Cor. + *55* Depth *383 fms*Shot or lead *55 lbs.*Bottom *Mang. spec. R.*Bottom temperature *42.5°*No. of thermometer *72447* Cor.

Corrected temperature

Air *81* Surface *76* Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>4-28-55</i>	<i>37-25</i>	0		
<i>29-50</i>	<i>36-20</i>	100		
<i>30-50</i>	<i>35-15</i>	200		
<i>31-50</i>	<i>34-20</i>	300		
<i>32-50</i>	<i>33-50</i>	<i>345</i> <del>400</del>		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Whale Hunt, 877° 30' E., 15 <sup>5</sup>/<sub>10</sub>.

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4475*Date *June 27th 1902*Machine *#1*Reel *Chapman*Turns *380* Cor. + *38*Depth *418 fms*~~Shot or lead~~ *36 lbs.*Bottom *S. R. Glob.*Bottom temperature *40.5*No. of thermometer *75444* Cor.

Corrected temperature

Air *80* Surface *76* Drift

Trawl or dredge

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

*03.45**12.55*

0

*04.30**11.25*

100

*05.15**10.15*

200

*06.05**09.10*

300

*06.50**08.10**380*~~400~~

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Whale Bone . 271° 5' E, 17 1/10

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

O. L. T. S.

557.

*Handwritten scribbles and notes in the top left corner.*

No. 4479 Date June 22 02

Sigsbee Machine. 1 Reel. Navy

Turns 407 Cor. + 41 Depth 448 fms

Shot or lead 36

Bottom S. R. Gt. S.

Bottom temperature 40.5

No. of thermometer 9244.9 Cor.

Corrected temperature

Air 80 Surface 76 Drift

Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

35.50	44.10	0
35.50	44.00	100
36.40	43.00	200
37.30	41.45	300
38.30	40.30	400
39.50	40.40	448

600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400

*U. S. S. Fish 8820 E, 20 5/10'*

			<i>corrected</i>	<i>20.5'</i>
		2500		
		2600		
		2700		
		2800		
		2900		
		3000		
		3100		
		3200		
		3300		
		3400		
		3500		
		3600		
		3700		
		3800		
		3900		
		4000		

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4450* Date *June 25 '12*  
Machine. Reel. *1000*  
Turns *469* Cor. + *47* Depth *516 fms.*  
Shot or lead *35 lbs.*  
Bottom *S*  
Bottom temperature *34.0*  
No. of thermometer *72447* Cor.  
Corrected temperature  
Air *79* Surface *76* Drift  
Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>11.00</i>	<i>23.00</i>	0		
<i>12.00</i>	<i>21.55</i>	100		
<i>13.50</i>	<i>20.55</i>	200		
<i>15.45</i>	<i>19.55</i>	300		
<i>17.45</i>	<i>18.55</i>	400		
<i>19.35</i>	<i>17.50</i>	<i>469</i> 500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

W. H. L. 1900. S. 81° E. 24 10  
 corrected: 2.810305. 21.8'

2500  
 2600  
 2700  
 2800  
 2900  
 3000  
 3100  
 3200  
 3300  
 3400  
 3500  
 3600  
 3700  
 3800  
 3900  
 4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:



No. *4451* Date *June 22, 1904*Machine. *Sigsbee* Reel. *Hand*Turns *290* Cor. + *29* Depth *319 fms*Shot or lead *35 lbs*Bottom *gy. s. fv.*Bottom temperature *44*No. of thermometer *92449* Cor.

Corrected temperature

Air *76* Surface *76* Drift

Trawl or dredge

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

*47.30**54.20*

0

*48.20**53.20*

100

*49.20**52.20*

200

*50.20**51.20**290*~~300~~

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Under Point, 8820 E 28.70'

28.6'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

1111/11

No. 411183. Date 5 May, 1902.

Sigsbee Machine. / Reel. Navy

Turns 205 Cor. + 20 Depth 225 fms.

~~Shot~~ or lead 36 Lbs.

Bottom *fine ss S.*

Bottom temperature 58° \*

No. of thermometer 92449. Cor.

Corrected temperature

Air 79. - Surface 77. - Drift

Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

5.55.10	6.00.40	0
56.10	57.40	100
57.10	58.20	200
57.15		225
		300
		400
		500
		600

\* A shark

attacked the *awaiting*  
*made hearing in*  
lead causing con-  
siderable jarring  
and probably inter-  
fering with the  
conduct of the  
sounding wire.  
Lead shows marks  
after shark's teeth.

700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400

Antarctica, E. of N 20° W, 15.0' - Penguin Is.

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
1830.	3700	
	3800	
205 20 225	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Rel. = 67. -

507.

No. 11031. Date 2 July, 1902.

Sigsbee Machine. 1 Reel. Hand

Turns 25 Cor. + 2 Depth 27 fms

Shot or lead 36 Lbs.

Bottom Green. fm. Co. co L.

Bottom temperature \*

No. of thermometer 92449. Cor.

Corrected temperature 54.75° F

Air 80° Surface 80° Drift 8.10

Trawl or dredge 8' Tangle Swabs on frame

S.M. SOUNDING WIRE.

DOWN.	UP.	TURNS.
6.31.25		0
		25
		100
		500
		200
		300
		400
* Thermometer		500
did not trip		600
		700
		800
		900
		1000
		1100
		1200
		1300
		1400
		1500
		1600
		1700
		1800
		1900
		2000
		2100
		2200
		2300
		2400

DREDGE ROPE.

DOWN.	UP.
6.37.50	6.57.20
40.00	6.57.00
	17 min

Dr. (unclear) light Y 20° W. 17.6'

		2500	
		2600	
		2700	
		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
		3400	
		3500	
		3600	
1870.	257.	3700	
		3800	(New thermometer)
25		3900	72.44(1)
27		4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Temples.			
50	Much coral -	2 kinds;	5 sps	
100	crabs;	2 sps alpheus;	1 squilla;	many
200	oysters;	few other mollusks;	3 sps	
300	(many) urchins;	2 sps starfish;	4- sps	
400	ophiurans;	1 holothurian;	many of	
500	one sp. clypeastrid;	several sps. sponges;		
600	3 sps. fishes;	2 sps branched byozoa;		
700	2 sps worms;	1 anemone;		
800				
900				
1000				

REMARKS:

No. *54* 44'83. Date *July 1902**Tanner* Machine. — Reel.Turns *27* Cor. + *1* Depth *28* fms.Shot or lead *26* Lbs.Bottom *fine sand*

Bottom temperature

No. of thermometer *78* Cor.

Corrected temperature

Air *79°* Surface *78°* Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

*7.02-**0**27*

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

*Also marks  
and at  
No. 4031.*

Diamond Rock Light, N 19° W., 18' 0

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:



597.

P.L. = 69.

No. *Δ. 4032* Date *9 July 1902.*

*Tanner* Machine. — Reel.

Turns *26* Cor. + *1* Depth *27 fms.*

Shot or lead *26 lbs.*

Bottom *fine co. S. Foram.*

Bottom temperature

No. of thermometer *92410* Cor. *7.10*

Corrected temperature *23.06*

Air *22* Surface *28* Drift *1.0*

Trawl or dredge *8' Tanner beam trawl on frame.*

*7.27* SOUNDING WIRE.

DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
<i>7.27-</i>		0	<i>7.27-</i>	<i>50.20</i>
		26		
		100	<i>38.10</i>	<i>53.40</i>
		50		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Station 14, N 14 W. 20.0

		2500	
		2600	
OK		2700	
HCB		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
		3400	
496	12	3500	
		3600	
		3700	
		3800	
		3900	
		4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	<p>Tangles =</p> <p>Much coral; 2 sps crabs;</p> <p>2 sp. alpheus; 1 munida; 1 hermit;</p> <p>5 sps fishes; sev sponges; 1 star-</p> <p>fish; sev of 2 sps. urchins; sev</p> <p>of 4 sps ophiurans; many clype-</p> <p>astrids; much bryozoa; also ophiu.</p>			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Dr 4033* Date *7 July, 1902**Tanner* Machine. — Reel.Turns *28* Cor. + *1* Depth *29 fms.*Shot or lead *26 lbs.*Bottom *fine co. S. Foram.*

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air *79* Surface

Drift

Trawl or dredge *Small Trawl; 10 min.*SOUNDING WIRE. *✓*

## DREDGE ROPE.

SOUNDING WIRE. <i>✓</i>		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>S- 01.20</i>	<i>02.10</i>	0	<i>S- 36.00</i>	<i>01.30</i>
<i>01.30</i>	<i>S- 01.50</i>	<i>100</i>	<i>39.00</i>	<i>59.20</i>
<i>Wreck end</i>		200		
<i>Dr 4033</i>		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Diamond Head Light, N 19° W, 20<sup>8</sup>/<sub>10</sub>'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

496  
28  
468

12

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tangles = Much coral; 2 sps crabs; 1 munida; 4 sps sea urchins; many clypeastrids; 6 sps ophiurans; 5 sps fishes; 3 sps mollusks; 1 hermit crab; 2 sps. sponge.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

Dr 4034

Date

July 9<sup>th</sup>

Tanner

Machine.

Reel.

Turns 27 Cor. + 1

Depth 28 fms

Shot or lead 26 lbs.

Bottom fine co S Foram, Algae.

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

79

Surface

78

Drift

{ 8230 S  
5/10'

Trawl or dredge

8, Quads in frame

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

9-06.30

07.15

0

9-31.30

57.40

06.45

06.50

50

34.00

55.00

Marks in

Dr 4033.

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Diamond Head Light, N  $19^{\circ}$  W,  $21\frac{5}{10}'$

OK  
H.C.B.  
3

496 12

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Tangles =

11 sps. Crabs; 2 sps. alpheus;  
1 squilla; 4 sps ophiurans; 3 sps  
urchins; 2 sps. sponge; many  
clypeastids; 4 sps. starfish;  
1 Compound ascidian; 1 worm;  
1 anemone; much coral; much  
bryozoa; little algae (2 or 3 sps.);  
2 sps. mollusks.



100.00  
29.40

32.30  
12.40  
18.50

66.55  
43.15  
23.40

11.52.30  
31.15  
29.15

32.05  
5.09.30  
21.35

14  
4

.2

~~4.6.2.1~~  
~~2.25~~  
P. G. full